

What is claimed is:

1. A radio transmission apparatus in a multicarrier CDMA system that transmits a signal by spreading the signal on a plurality of subcarriers, comprising:

5       a weighting section that assigns weights which vary from one spreading code to another and from one chip to another to the spread signals; and

          a transmission section that multiplexes the weighted signals and transmits the multiplexed signal.

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2. The radio transmission apparatus according to claim 1, wherein said weighting section uses such weighting factors that orthogonality among spreading codes is secured when a reception apparatus performs despreading using factors so as to obtain maximal ratio combining as the weighting factors to be used for said weighting.

3. The radio transmission apparatus according to claim 1, wherein said weighting section uses such weighting factors that when the reception apparatus decomposes a matrix into eigenvalues using a spreading factor as the size of the matrix based on channel estimation value information for each subcarrier, a signal having a maximum eigenvalue is extracted as the weighting factors to be used for said weighting.

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4. A radio communication terminal apparatus comprising the radio transmission apparatus according to claim 1.

5. A radio communication base station apparatus comprising the radio transmission apparatus according to claim 1.

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6. A radio transmission method for a multicarrier CDMA system that transmits a signal by spreading the signal on a plurality of subcarriers, comprising the steps of:

10        assigning weights which differ from one spreading code to another and from one chip to another to the spread signals; and

              multiplexing the weighted signals and transmitting the multiplexed signal.